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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,654	11/21/2001	Richard Knauer	CAO-0111	3656
23413	7590	03/22/2004	EXAMINER DAHBOUR, FADI H	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			ART UNIT	PAPER NUMBER

3743

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/990,654

Applicant(s)

KNAUER ET AL.

Examiner

Fadi H. Dahbour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-25,28 and 31 is/are rejected.
- 7) ☒ Claim(s) 7,8,26,27,29,30 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 11/19/01, 12/6/01, 6/12/02, 3/11/03.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 11-17, 31 and 32 are objected to because of the following informalities:

In line 1 of claim 31, the number "27" should be changed to --28--.

In line 1 of claim 32, the number "27" should be changed to --28--.

In line 8 of claim 11, the word "first" should be changed to --second--.

In line 9 of claim 11, the word "first" should be changed to --second--.

Appropriate corrections are required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 28 & 31 are rejected under 35 U.S.C. 102(b) as being anticipated by

Falco (US5799658).

Falco discloses a mold for forming a foam earplug (Figs.4-6) comprising a lower mold portion (110 of Fig.4) including a lower cavity (112 of Fig.4), and an upper mold portion (120 of Fig.4) including an upper cavity (122 of Fig.4), and a means for venting a gas during a rising of the foam (see "a mold vent during the manufacturing process" in lines 36-37 of col.7), wherein the lower and upper mold portions are engageable so as to communicably engage the lower and upper cavities (Fig.4), wherein the means for venting comprises at least one annular flange disposed on the upper mold portion in the upper cavity and including at least one space formed therein to allow the venting of the gas (Figure 6).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-6, 9-13, 15-20, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falco (US5799658) in view of ENVAC (FR2230336).

Falco discloses an earplug (Figs.1-9) comprising a foam (12 of Figs.2-3), and a component (14 of Figs.2-3) nestable with and bondable with the foam (12 of Figs.2-3), wherein the component is disposed at least partially within (18, 20 of Figs.2-3) a foam insertable portion (12 of Figs.2-3), wherein the foam is selected from the group comprising polyurethane, acrylic, acrylic blends, and mixtures and combinations including at least one of the foregoing materials (see "polyurethane or acrylic blend" in line 46 of col.6), wherein the component is selected from the group comprising plastic, paper, dense paper, stiff foam, semi-stiff foam, foam, porous foam, cardboard, rubber, and combinations including at least one of the foregoing materials (see "plastics" in lines 41-42 of col.5), wherein the at least one component has at least one passage disposed therein (see "porous" in line 29 of col.4), wherein the component comprises a vent for venting a mold during a manufacturing of the earplug (see "a mold vent" in line 10 of abstract), wherein the vent is disposed across the length of the component (see "porous component 14" in line 37 of col.4, also see 14 of Fig.3A), wherein the vent is disposed at a top of the component (see "tip 20" in line 38 of col.4, also see 20 of Fig.3A), further

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comprising a second earplug (Fig.7) comprising a second foam (12 of Figs.2-3) and a second component (14 of Figs.2-3) nestable with and bondable with the second foam (12 of Figs.2-3) wherein the second component is disposed at least partially within (18, 20 of Figs.2-3) a second foam insertable portion (12 of Figs.2-3), and a connection device having a first end attached to a first handle portion and a second end attached to a second handle portion (Fig.7), wherein the first and second component are nonporous (see "non-porous... within the scope of the present invention" in lines 19-20 of col.6), wherein the connection device is a flexible cord (Fig.7), wherein the connection device is an under the chin device or headband (Fig.9), further comprising a method of making an earplug (Figs.4-6) comprising disposing a component within a mold (see "component is placed into... mold" in lines 54-55 of col.6), introducing a foam or foamable mixture into the mold (see "foam or foamable mixture is introduced into the mold" in lines 55-56 of col.6) and causing the foam or foamable mixture to rise about the component (see "and caused to rise" in line 56 of col.6) such that the component is nested within and bonded with the foam (Figs.2-3) such that the component is at least partially within (18, 20 of Figs.2-3) a foam insertable portion (12 of Figs.2-3), wherein the foam or foamable mixture is self-rising (see "self-rising" in line 57 of col.6), further comprising venting the mold during the causing the foam or faomable mixture to rise to allow a gas to move from an interior of the mold to an exterior of the mold (see "a mold vent during the manufacturing process... for gas trapped in the mold to escape... into the atmosphere" in lines 9-11 & 13 of col.7) wherein the venting includes forming venting passageways (see "porous" in line 12 of col.7) between the component and the mold during the

disposing of the component within the mold (see "gas may be vented through the porous part" in line 12 of col.7, also see "porous component" in line 9 of col.7), wherein the venting passageways (see "porous" in line 12 of col.7) extend from the interior to the exterior (see "gas trapped in the mold to escape...gas may be vented through the porous part into the atmosphere" in lines 11-13 of col.7).

Falco lacks the component being at least partially within a foam handle portion. ENVAC discloses a component being at least partially within a foam handle portion (Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by ENVAC, in the device of Falco, to make it more soft to the touch.

6. Claims 4, 14 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falco (US5799658) in view of ENVAC (FR2230336) and Genzer.

Falco and ENVAC, as described above, disclose all the features claimed except at least one depression, Genzer discloses at least one depression (Figs.1-2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the feature taught by Genzer, in the device of Falco and ENVAC, for improved gripping.

#### ***Allowable Subject Matter***

7. Claims 7-8, 26-27, 29-30, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

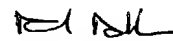
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leight ('794), Knauer ('715), Hiselius et al and McLean are cited to show earplugs and methods of making them.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadi H. Dahbour whose telephone number is 703-306-5479. The examiner can normally be reached on M-F, 9am-5:30pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett, can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Fadi H. Dahbour  
Examiner  
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